

PATENT  
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C L A I M S

1. A synthetic bottle stopper made from a foamed thermoplastic elastomer composition comprising
  - a) one or more thermoplastic block copolymers
  - c) a blowing agent, and optionally
  - d) one or more plasticisers,  
characterised in that the composition further comprises
  - b) one or more branched polyolefins having a melt flow index of from 0.05 to 400 (at 2.16 kg/190 °C, determined in accordance with ASTM D 1238).
- 10 2. A synthetic bottle stopper as claimed in claim 1, comprising one or more styrenic block copolymers as component a), wherein the or each styrenic block copolymer contains one or more glassy polymer blocks made of polymerized vinylaromatic monomer in an amount of at least 80 mole% on the total monomer content of the block and having one or more elastomeric polymer blocks made of polymerized conjugated diene in an amount of at least 80 mole% on the total monomer content of the block.
- 15 3. A synthetic bottle stopper as claimed in claim 2, wherein the vinylaromatic monomer is styrene and wherein the diene is butadiene and/or isoprene.
- 20 4. A synthetic bottle stopper as claimed in claims 2 to 3, wherein the or each styrenic block copolymer has an overall content of vinylaromatic monomer in the range of 10 to 50% by weight, and a total apparent molecular weight in the range of from 30,000 to 400,000 g/mol.
- 25 5. A synthetic bottle stopper as claimed in claims 1 to 4, wherein component a) comprises a triblock polymer or a mixture of a diblock and triblock copolymer.

6. A synthetic bottle stopper as claimed in claims 1 to 5, wherein component b) comprises a polymer of 1-butene and/or a high melt strength polymer of propene.
- 5 7. A synthetic bottle stopper as claimed in claim 6, comprising component b) in an amount of 10 to 100 parts by weight per 100 parts by weight of component a).
8. A synthetic bottle stopper as claimed in claims 1 to 7, comprising a blowing agent in an amount from 1 to 10 %wt, basis the total composition.
- 10 9. A process for preparing a foamed thermoplastic elastomer composition comprising
  - a) one or more thermoplastic block copolymers
  - b) one or more branched polyolefins having a melt flow index of from 0.05 to 400 (at 2.16 kg/190 °C, determined in accordance with ASTM D 1238)
  - c) a blowing agent, and optionally
  - d) one or more plasticisers, wherein components a) to d) are fed either partly or fully as a pre-blend or separately in a discontinuous or continuous mixer.
- 15 20 10. A foamed article obtainable by the process of claim 9.

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Claims A1